

**ATTACHMENT J-20**  
**LOGISTICS REQUIREMENTS MATRIX**  
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## ATTACHMENT J-20 LOGISTICS REQUIREMENTS MATRIX

### 1 INTRODUCTION

This matrix identifies the full set of contractor and government tasks, spanning the range of logistics elements that are necessary to implement the ISPs, to support legacy and new assets, and to dispose of assets at the end of their useful life.

#### 1.1 HOW TO USE THE MATRIX

This table provides a nominal task set, and the Contractor may tailor the task descriptions, as appropriate for implementation of the ISPs. Each task shall be worded such that it is usable for dividing the work into assigned responsibilities. These tailored tasks form the basis for specific logistics task descriptions in the development of the SOWs.

The contractor shall indicate for each task in each Phase whether the responsibility is Contractor (“C”), Government (“G”), Jointly Contractor and Government (“J”), or Not Applicable to the Phase (“X”). The matrix has been initially populated with contractor responsibilities which constitute the baseline tasks for which the contractor is responsible to deliver as well as those tasks which are inherently governmental. The contractor shall indicate the responsibilities for the remaining tasks as appropriate to the proposal. There are several possible circumstances in which an individual task could properly be categorized as “Jointly Contractor and Government (J)” during a particular phase. Some examples are as follows:

- Government and Contractor personnel work together in a Matrix Product Team to accomplish the task and are jointly accountable for the results or product of that task.
- The Contractor begins the task and at some point *during the same phase* passes the responsibility and their work to date on to the government for further effort, leading to completion of the work for that phase.
- The task description is actually a roll-up of subtasks, some of which are contractor responsibility, others of which are government responsibility

Bold underlined text within a task description indicates a CDRL deliverable that is implicit in the task (e.g. **ISP**). Bold underlined text in parentheses within a task description indicates a part of a CDRL deliverable required elsewhere in J20 that is implicit in the task (e.g. **(ISP)**). Bold underlined text in braces within a task description indicates a part of a CDRL deliverable required by other sections of this contract (e.g. **{RMP}**). If the Contractor proposes different or modified tasks, then the Contractor shall ensure that deliverable products implicit in the descriptions are proposed and shall associate the task descriptions with the CDRL using the underlined bolded text or other suitable approach. Use of the IPDE for development and dissemination of task products is encouraged.

The contractor is permitted and encouraged to submit the LRM, Tables J20-1 through J20-4 in his own format and using his own database, spreadsheet, project management, or word processing application.

## **2 ASSET PHASED PROCUREMENT**

The following procurement phase descriptions provide the context for the planning and execution of the logistics tasks.

### **2.1 CONCEPT AND TECHNOLOGY DEVELOPMENT (CTD)**

Concurrent with the concept design for each asset, the Contractor shall perform all the tasks specified in the Logistics Requirements Matrix (LRM) applicable to the CTD phase to a level appropriate for the concept and its maturity. Appropriate methodologies and activities for this phase include but are not limited to: market analysis, feasibility studies, life cycle and total ownership cost analysis, mission requirements and analysis, modeling and simulation, preliminary supportability analysis, qualitative and quantitative logistics effectiveness analysis, design criteria, system specification, evaluation of alternatives, identification of preliminary logistics resource requirements.

### **2.2 SYSTEM DEVELOPMENT AND DEMONSTRATION (SDD)**

Concurrent with the system development and demonstration for each asset, the Contractor shall perform all the tasks specified in the LRM applicable to the SDD phase to a level appropriate for the concept and its maturity. Appropriate methodologies and activities for this phase include but are not limited to: functional analysis and allocation of logistics requirements, modeling and simulation, system analysis, optimization, synthesis, trade-offs and definitions, design support, predictions, system safety analysis, and supportability analysis.

### **2.3 PRODUCTION AND DEPLOYMENT (P&D)**

Concurrent with the production and deployment of each asset, the Contractor shall perform all the tasks specified in the LRM applicable to the P&D phase to a level appropriate for the asset and its maturity. Appropriate methodologies and activities for this phase include but are not limited to: detail system/product design; design support analysis, predictions, system test and evaluation, data collection, analysis, feedback for corrective action; production and/or construction of assets; initial implementation and execution of tasks; and logistics management activities.

### **2.4 OPERATIONS AND SUPPORT(O&S)**

The Contractor shall perform all the tasks specified in the LRM applicable to the O&S phase to a level appropriate for the asset and its maturity. Appropriate methodologies and activities in this phase include but are not limited to: system operation in the field, corrective and sustaining maintenance and logistics support, supply support, test and support equipment, personnel and training, facilities, Packaging, Handling, Storage & Transportation (PHS&T), Information Technology (IT), customer service, modeling and simulation, and ongoing logistics management efforts, assessment of logistics support capability, and data collection, analysis and feedback for corrective action.

**2.5 *DISPOSAL (DIS)***

The Contractor shall perform LRM tasks as applicable to the disposal phase. . Appropriate methodologies and activities in this phase include but are not limited to; remediation, material phase-out, recycling and/or disposal, title transfer.

Table J20-1 – Overarching Requirements					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>1 SYSTEM/ASSET REQUIREMENTS</b>					
1.1 Develop, implement, manage, and continuously improve an integrated, comprehensive, and achievable IDS ILS design. This design shall define the concept of logistics and application of the concept to the IDS and its assets. Document the design in web-enabled <b><u>Integrated Support Plans (ISPs)</u></b> for each new and upgraded legacy asset in the IDS. These ISPs shall be evolved from the Contractor’s ISP and its appendices from the previous contract phase and shall be maintained current. Web-basing of these plans shall include provision for concurrent review/approval and user feedback.	C	C	C	C	C
1.2 Continuously evaluate impact on legacy and non-IDS assets, practices, software, funding, business processes, and operations within the Coast Guard. Coordinate interfaces, resolve incompatibilities. Establish guidelines and overarching criteria for organic vs. outsourcing decisions; review, approve, and implement such decisions as recommended by responsible teams in the individual logistics elements and/or in connection with support of legacy and new assets. <b><u>(ISP)</u></b>	C	C	C		
1.3 Identify or develop standardized logistics functional requirements, specifications, and processes and integrate them into the asset design, manufacture, and operation through the IPPD process and its associated IPTs and IPDE.	C	C	C		
1.4 Develop, model, demonstrate feasibility, and implement a manpower /personnel system that fully supports the IDS Concept of Operations, Logistics Plan, Implementation Plan, and asset/facility mix while taking into account the non-IDS sector of the Coast Guard. Provide for recruiting and retention, training, career paths, and all other key factors to ensure robustness and viability of the personnel and manpower system during and after IDS. <b><u>(ISP)</u></b>	C	C	C		
1.5 Establish and implement decision criteria for commercial support vs. organic support, letting and managing contracts, establishing and enforcing performance requirements, periodic reevaluations of approach and the closing out of contracts. <b><u>(ISP)</u></b>	C	C	C		

Table J20-1 – Overarching Requirements					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
1.6 Identify Government and Contractor activities participating in logistics support, with definitions of their responsibilities and interfaces, including the transition of the organization over time. Provide and maintain a tabular list. Provide coordination between government and Contractor to identify and achieve integral IDS logistics design aspects that depend on USCG to implement, including impact assessment and recovery planning for elements not implemented. <b><u>(ISP)</u></b>	C	C	C		
1.7 Provide logistics input to the Integrated Master Schedule IAW Attachment J-7. <b><u>{IMS}</u></b>	C	C	C	C	C
1.8 Provide logistics input to the Risk Management Organization IAW Attachment J-7. <b><u>{RMP}</u></b>	C	C	C	C	C
1.9 Provide coordination between government and Contractor to identify and achieve integral IDS logistics design aspects that depend on USCG to implement, including impact assessment and recovery planning for elements not implemented. <b><u>(ISP)</u></b>	C	C	C		
1.10 Develop measures of effectiveness for performance and continuous improvement of the logistics support, and associate them with their respective Logistics Functional Requirements. Track and report performance. Update and modify the MOEs as necessary and in accordance with contract procedures. Identify the benefits (operational effectiveness, performance, etc.), costs, and risks associated with discrete elements of the logistics concept in terms of these MOEs, with supporting rationale. <b><u>(ISP)</u></b>	C	C	C		
1.11 Charter and staff a Data Management Organization, including a Review Board to review the total program data requirements and decide which tasks and data products best support the overall program objectives. <b><u>(ISP)</u></b>	C	C	C		
1.12 Provide logistics input to the Configuration Management Program as outlined in Attachment J-7. <b><u>{CMP}</u></b>	C	C	C	C	C
1.13 Develop a set of standards for policies and procedures, Documented in the <b><u>Logistics Standards Plan</u></b> , to be in the development, production and execution of logistics. This set of standards shall include standards for all elements of logistics.	C	C	C		

Table J20-2 Human Systems Integration					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>1 PERSONNEL AND MANPOWER</b>					
1.1 Plan, establish, implement, and continuously improve crewing/manning concepts for new or upgraded assets. The plan shall address process improvements to current and new CG personnel systems to ensure plan feasibility, mitigation measures of gapped billets and shortfalls. This task shall also address contractor personnel working in facilities in addition to or instead of government employees. <b>(ISP)</b>	C	C	C		
1.2 Establish system and asset manpower requirements for operator, maintenance, and support personnel through analysis of the world of work, review of existing studies and initiatives, establishment of training requirements, and careful attention to USCG mission requirements. This includes number of personnel by location, skill levels, and job classifications within the USCG and Contractor organizations. Document and defend the underlying rationale/analysis. Produce, implement, and continuously improve. This task shall also address contractor personnel working in facilities in addition to or instead of government employees. <b><u>Manpower Requirements Analyses, Personnel Allowance Lists (PALs), Reserve PALs (RPALs).</u></b>	C	C	C		
1.3 Identify actions, technical data needs, responsibilities, and timetable to meet the personnel requirements for new or upgraded assets. Staff assets as they come on line and through disposal. <b>(ISP)</b>	C	C			
1.4 Develop and incorporate design/operational features of IDS that will positively impact retention of USCG personnel; provide supporting rationale; monitor effects actually achieved; and continuously improve. <b>(ISP)</b>	C	C	C		



Table J20-2 Human Systems Integration					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
1.5 Address impact/interface with current personnel policies, procedures, tech data/records, and management systems. Identify, acquire, and implement new personnel record and management systems integral to IDS and ensure interface and compatibility with non-IDS CG. Identify and implement personnel policy, procedure, and administrative changes to support IDS. Accomplish orderly transition to IDS personnel management concepts and continuously improve. <b><u>(ISP)</u></b>	C	C			
1.6 Provide documentation of current and historical policies and practices, systems, statistics, and databases, as necessary to support cost/benefit analyses, justify replacement or improvement of existing systems, and transition to new systems and practices for IDS. <b><u>(ISP)</u></b>	C	C			
1.7 Develop, model, implement, and continuously improve a workable policy for military assignments into and out of IDS: rotational plan, tour lengths, career path impacts and plans, including before-and-after specific personnel assignment to IDS, etc. Provide career paths, balancing needs of the organization against needs of the individual, balancing sea vs. shore assignments, and OPTEMPO vs. PERSTEMPO. Provide technical/professional career paths in areas of expertise as required for core organic support of IDS. <b><u>(ISP)</u></b>	C	C			
1.8 Develop and implement methods and policies for skills acquisition including alternatives to training, such as direct accession, intra- or inter-unit recycling of IDS billets, contracting for civilian support, utilization of USCG Reserve, etc. <b><u>(ISP)</u></b>	C	C			
1.9 Develop and implement manning and personnel requirements including phase-out and reassignments for decommissioning or retirement of assets , and closing or realignment of facilities as required. <b><u>(ISP), {Disposal Plans}</u></b>				C	
1.10 Identify and describe with each update of the ISP the tasks that will be completed for the next update of the ISP by logistics element to comply with the requirements of this attachment. <b><u>(ISP)</u></b>	C	C	C	C	C

Table J20-2 Human Systems Integration (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>2 TRAINING AND TRAINING DEVICES</b>					
2.1 Establish and implement the overall approach and strategies for training throughout the IDS life cycle, and include interface and/or integration with USCG Workforce Performance and Training Strategy, where appropriate. <b><u>System Training Plan, and Asset Training Plans</u></b>	C	C	C		
2.2 Design, develop, and implement instructional systems to include media selection models and criteria, new course descriptions, modifications to existing training programs, interface/integration with the USCG training system. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		
2.3 Perform <b><u>Training Needs Assessment And Analysis</u></b> for new requirements at system, asset and job levels, i.e. methods, means, and plans. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C	C	
2.4 Develop and implement an integrated concept for unit- and crew-level training for legacy, pre-commissioning, and follow-on crews for IDS, its assets, and its logistics support. Includes billet level, team, (multi-unit, fleet, system) watch stations, evolutions, and (multi-) mission execution. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		
2.5 Develop, validate, and continuously improve master training plans delineating asset-level, team training requirements by billet. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		
2.6 Identify requirements for major training aids (including but not limited to simulators, and equipment mock-ups) and computer resources. Design support for such aids. Acquire the aids and establish logistics support for them. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		

Table J20-2 Human Systems Integration (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
2.7 Identify all recurring individual, unit, and multi-unit training requirements that (a) are necessary for safe operations, and (b) require whole or partial dedication of operational asset(s) to execute. Incorporate such “training hours” into the CONOPS. Design and implement programmatic and operational safeguards to ensure that these and other safety-related training requirements are routinely scheduled, budgeted, and unfailingly accomplished. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		
2.8 For those training requirements for which the necessary or preferred delivery method is On the Job Training (OJT) or realistic exercises utilizing operational assets, identify and provide any necessary hardware- or software- resident training support capability, whether this capability is built into each affected asset or is modular for cross-decking from asset to asset as needed. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		
2.9 Acquire, distribute, and maintain training materials. Build in a feedback mechanism for recording and acting on user comments, suggestions, and lessons learned. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		
2.10 Develop a Training Schedule for precommissioning through operational phases for the areas of operations, maintenance, and support for each asset type. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		
2.11 Implement a process for continuing improvements to the efficacy of training to ensure that the objectives are mastered, the training is actually applied on the job, and that costs are optimized. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		
2.12 Identify and implement infrastructure/ resource changes -- staffing, funding (recurring and nonrecurring), training allowance billets (TABs) or equivalent, and outsourcing requirements. <b><u>(System Training Plan, Asset Training Plans)</u></b>	C	C	C		
2.13 Conduct training as proposed.					
2.14 Develop and implement interfaces with the Total Ownership Cost and Operational Effectiveness models. <b><u>{TOC, CONOP}</u></b>	C	C	C	C	C

Table J20-2 Human Systems Integration (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
2.15 Plan and execute disposal of training capability, training aids, and their logistics support in coordination with decommissioning or retirement of assets, and closing or realignment of facilities, replacement of C4ISR systems and subsystems, including manning and personnel requirements for phase-out and reassignment. <b><u>(System Training Plan, Asset Training Plans)</u></b>				C	

Table J20-2 Human Systems Integration (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>3 SAFETY AND SURVIVABILITY</b>					
3.1 Develop, implement, and continuously improve an <b><u>IDS System Safety Program Plan</u></b> .	C	C	C		
3.2 Develop, implement, and continuously improve the asset specific requirements of the IDS System Safety Program. (To address hardware, software, personnel, operations, training and support). <b><u>(IDS System Safety Program Plan)</u></b>	C	C	C		
3.3 Perform safety assessments from system level down to major equipment per asset class (e.g. shipboard fire safety analysis, closed loop hazard tracking, boat launching/recovery, etc.). <b><u>(IDS System Safety Program Plan)</u></b>	C	C	C		
3.4 Identify and resolve personnel safety requirements not identified in the air, C4ISR and surface asset designs (e.g., facility-related concerns, or safety concerns related to potentially new operational scenarios.) <b><u>(IDS System Safety Program Plan)</u></b>	C	C	C		

Table J20-2 Human Systems Integration (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
3.5 Plan develop, implement, and continuously improve <b><u>Asset Survivability Plans</u></b> , to include at a minimum, Damage Control policy and procedures, equipment and its usage, AT/FP, and training.	C	C	C		

Table J20-2 Human Systems Integration (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>4 HUMAN FACTORS ENGINEERING (HFE)</b>					
4.1 Develop, implement, and continuously improve a <b><u>HFE Plan</u></b> that provides for continuing liaison and reporting capability with users and other stakeholders in the system development. Establish human factors program schedules in sufficient detail to maintain visibility and control of the human factors engineering process; integrate into and support the Integrated Master Schedule. <b><u>(ISP), {Asset Designs, IMS}</u></b>	C	C	C		
4.2 Employ appropriate analytical techniques such as operational sequence evaluations, detailed task analysis, and error analysis at the earliest opportunity to influence design alternatives. <b><u>(HFE Plan)</u></b>	C	C	C		

Table J20-2 Human Systems Integration (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
4.3 Establish human factors requirements and incorporate the human element in all procurement phases at asset and equipment levels, to include both hardware and software interfaces. Consider anthropometric, sensory, cognitive, psychological, and physiological factors (i.e. physical, mental, workload, performance limits, etc.) to ensure that IDS systems can be safely and effectively operated, maintained, and controlled with the prescribed manpower force mix. <u>(HFE Plan, ISP), {Asset Designs}</u>	C	C	C		
4.4 Identify and eliminate program risks associated with HFE critical factors in accordance with IDS Risk Management Plan. <u>{RMP}</u>	C	C	C	C	
4.5 Maintain control and traceability of quantitative and qualitative human factors and reliability requirements related to personnel interfaces. Model, test, and otherwise verify or demonstrate that man-machine interfaces are optimized, adjustable to the individual user, and consistent with the manpower/personnel allowance and requirements in accordance with the Test and Evaluation Program Plan <u>{TEPP}</u>	C	C	C		

Table J20-2 Human Systems Integration (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>5 HABITABILITY</b>					
5.1 Establish system approach and asset-level functional requirements for habitability and work-life quality for all assets where appropriate. Develop reporting capability, monitor and assess success, and continually improve. <b>(HFE Plan, ISP), {Asset Designs}</b>	C	C	C		
5.2 Analyze, model, demonstrate, or otherwise validate and verify habitability aspects of designs in key areas such as personnel accommodations, facilities, and services. <b>(HFE Plan, ISP), {Asset Designs}</b>	C	C	C		
5.3 Develop, implement and continuously improve a plan which describes the anticipated impacts and mitigation for, surge and transient personnel, indoctrination/training personnel, civilian & military technical representatives, official visitors/guests, and individuals rescued or arrested at sea and taken aboard. Plan should also address need for segregation from crew and detainment requirements to the extent for habitability and safety. <b>(HFE Plan, ISP), {Asset Designs}</b>	C	C	C		
5.4 Establish requirements for and design in habitability-related environmental factors (.i.e, HVAC, noise, lighting, overhead clearance, fresh water, etc.). Provide a method for reassessment, modification, and improvements where appropriate. <b>(HFE Plan, ISP), {Asset Designs}</b>	C	C	C		

Table J20-3 Logistics Supportability					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>1 MAINTENANCE</b>					
1.1 Develop the maintenance concept(s), basic support policies, and functional logistics support requirements identified in the contract baseline ISP, recognizing the influence of operational scenarios on readiness requirements and document in the <b><u>Class Maintenance Plan</u></b> . The maintenance concept and plan shall provide for the need to support assets deployed out of hemisphere or in support of National Security interoperability requirements.	C	C	C		
1.2 Identify and describe the methods, responsibilities, processes, and services/assets for implementing the maintenance concept to include corrective, conditional, predictive and preventative maintenance at the organizational, intermediate, or depot level as appropriate to the proposed maintenance concept. ( <b><u>Class Maintenance Plans</u></b> )	C	C	C		
1.3 Establish and provide optimal system and asset hardware and software support (as proposed) throughout the IDS life cycle, including interfaces with or replacement of existing practices.	C	C	C		
1.4 Plan and provide interim maintenance support during introduction of the individual asset classes and their systems/equipment into service. Plan should include all organic and outsourced support functions as well as requirements/criteria necessary for transition to sustainment. ( <b><u>ISP</u></b> )	C	C	C		
1.5 Perform Repair Analysis sufficient to support and justify the maintenance requirements including; facilities, equipment, frequency, supply support, training, and personnel, and document in a <b><u>Level of Repair Analysis</u></b> .	C	C	C		
1.6 Actively identify and implement feasible and cost-effective initiatives to integrate air, surface, C4ISR and test/support equipment maintenance into the appropriate maintenance-delivery organization. ( <b><u>Class Maintenance Plan</u></b> )	C	C	C		



Table J20-3 Logistics Supportability					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
1.7 Establish and implement the means to measure, monitor, and continuously improve the quality of maintenance, focusing on system operational effectiveness and life cycle cost, and continuing throughout the IDS life cycle. Plan, implement, and continuously improve computer capability to manage, analyze, track and report maintenance due, requested, and accomplished. Provided for maintainers to be trained in proper reporting procedures to support maintenance analysis, and develop automated aids, as necessary, to completing maintenance reports properly. <b>(ISP, Class Maintenance Plan)</b>	C	C	C		
1.8 Identify, plan, and implement facility changes, new facilities, and facility closures to enable the planned IDS maintenance capability. <b>(Facilities Impact Assessment)</b>	C	C	J	G	
1.9 Coordinate with the Manpower and Personnel logistics elements to ensure proper and timely staffing and training of maintenance facilities and organizations <b>(ISP)</b>	C	C	C		
1.10 Plan and execute disposal of maintenance capability, equipment, facilities, etc. in coordination and conjunction with replacement of obsolete equipment, decommissioning or retirement of assets, and closing or realignment of facilities. <b>(Class Maintenance Plans)</b>				C	
1.11 Develop and maintain <b>Equipment Support Plans</b> for maintenance-worthy equipment. These plans will define and integrate requirements for supply support, facilities, training, PHS&T, and other logistics elements. They will set forth requirements, and roles and responsibilities for the Contractor and Government. They will support commonality of equipment across asset classes, where applicable.	C	C	C		
1.12 Provide maintenance services at the required levels of support in accordance with the maintenance concept. <b>(Class Maintenance Plans).</b>					

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>2 RELIABILITY, MAINTAINABILITY, AND AVAILABILITY (RM&amp;A)</b>					
2.1 Establish RM&A design objectives and thresholds based on the SPS and using the systems engineering process. To support and augment the designed-in RM&A capability and characteristics, integrate results of RM&A analyses with design, development, and utilization of other logistics requirements, systems, and infrastructure, such as storage, maintenance, transportation, training, and operational use identified concurrent with the design process. <b>(ISP, {Asset Designs})</b>	C	C	C		
2.2 Identify mission- or safety-critical single point failure modes. Eliminate them from the design or mitigate them by making the design robust (e.g., insensitive to the causes of failure, exhibit graceful degradation, or redundant). Perform and document in a <b><u>Failure Modes Effects and Criticality Analysis</u></b> .	C	C	C		
2.3 Establish and provide maintainability goals and design criteria, and maintainability design features and characteristics (e.g., accessibility, use of tools, parts commonality, etc.) that support achievement of these goals. <b>(ISP, <u>Class Maintenance Plan</u>), {Asset Designs}</b>	C	C	C		
2.4 Identify and provide list of mission essential/critical systems, equipment and/or components. Develop and implement the approach and methodology for ensuring that all identified items will be capable of meeting their allocated RM&A requirements. <b>(ISP, <u>Class Maintenance Plan</u>)</b>	C	C	C		
2.5 Develop an Asset Reliability Management Program. The Contractor shall designate a reliability engineer who shall be delegated the necessary authority to effectively implement the reliability program and shall be the Contractor's principal reliability point of contact. <b>(ISP, <u>Class Maintenance Plan</u>)</b>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
2.6 Develop an Asset Closed Loop Program Plan(e.g., FRACAS, FMEA and FMECA). The Contractor shall track and report failures from discovery to close-out. The Contractor shall record failures and faults or non-conformance experienced on end-item articles during Contractor developmental tests. The Contractor shall perform failure analysis on all failures and faults reported to determine the root cause of failure and define the failure mechanism. The Contractor shall develop and implement corrective actions to eliminate recurrence of the failure mechanism and its effects. <u>(Class Maintenance Plan)</u>	C	C	C		
2.7 Develop and implement an integrated digital process to document maintenance functions. It will document tasks/analyses/repairs assigned to all activities (Organic and Contractor Organizational, Intermediate, and Depot-level). It will include any equipment performance margins used to ensure equipment meets RM&A requirements, and rationale for margins used. <u>(Class Maintenance Plan)</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>3 COMMONALITY</b>					
3.1 Establish functional requirements for commonality in equipment selection at system, asset, and major subsystem levels. Ensure design and procurement functions incorporate and meet the established requirements <u>(ISP), {Asset Designs}</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
3.2 Establish and enforce functional requirements for asset and process commonality in areas of procurement, maintenance, supply, special tools, test and support equipment, technical documentation, training, and any other significant logistics-related cost drivers. <u>(ISP), {Asset Designs}</u>	C	C	C		
3.3 Identify and target specific human/machine interfaces where consistency of controls, layout, operating or maintenance procedures, etc. inherently enhances personnel or equipment safety. Design in commonality of such interfaces. <u>(ISP), {Asset Designs}</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>4 MODULARITY</b>					
4.1 Establish functional requirements for modularity in design to the extent practical and cost effective to facilitate mission execution, operations, replenishment, maintenance, and upgrade of hardware and software at the system, asset, and major subsystem levels. <u>(ISP), {Asset Designs}</u>	C	C	C		
4.2 Analyze and incorporate HSE/manning analyses in modularity designs. <u>(ISP), {Asset Designs}</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
4.3 Evaluate Modularity as an option in developing maintenance capability and acquiring maintenance facilities and equipment such that modular elements of maintenance organizations may deploy with equipment and spares to support assets deployed on missions away from homeport. <u>(ISP), {Asset Designs}</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>5 OPEN SYSTEMS</b>					
5.1 Develop and implement a management approach to implementing the Open System architecture requirement of the SPS to include organization, interface requirements/standards, and equipment selection criteria. <u>(ISP), {Asset Designs, C4ISR Architecture}</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>6 COMPONENT, SUBSYSTEM &amp; SYSTEM INTERFACE</b>					
6.1 Define and control interfaces. Document the extent to which the system and equipment implement standard – i.e. widely used, well defined, and non-proprietary – interfaces. <u>(ISP), {Asset Designs, C4ISR Architecture}</u>	C	C	C		
6.2 Develop, implement, and support software, communications, and hardware interfaces necessary for new IDS logistics computer resources to share data with legacy Deepwater and non-Deepwater applications. Negotiate and implement standards and procedures with “owners” of such legacy systems for IDS to draw and insert data in the manner necessary and to transition data from legacy to new as applicable. . <u>(ISP), {Asset Designs, C4ISR Architecture}</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>7 COMPUTER RESOURCES SUPPORT</b>					
7.1 Provide a Computer Resources Plan for acquisition, development, training, upgrade, configuration control, and maintenance of IDS computer software resources, the hardware upon which the software resides, the interfaces with other C4ISR systems, and the facilities where the computer resources will be housed. <u>(ISP), {C4ISR Architecture}</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
7.2 Provide functional descriptions of computer programs and data required for system support, including automated condition monitoring programs, maintenance diagnostic routines, and information-processing systems. Acquire or develop the programs and data, provide maintenance, and upgrade periodically for technology refreshment. <b><u>(ISP), {C4ISR Architecture}</u></b>	C	C	C		
7.3 Ensure full computer resources support for logistics systems are represented in the C4ISR architecture. <b><u>(ISP), {C4ISR Architecture}</u></b>	C	C	C		
7.4 Develop a Computer Security Plan and implement security and backup functions for all software applications and data, commensurate with the importance of the data. <b><u>(ISP), {C4ISR Architecture}</u></b>	C	C	C		
7.5 Coordinate with existing Training, Personnel, Supply Support, Facilities, and Maintenance elements to ensure supportability of all logistics related computer resources.	C	C	C		
7.6 Provide interim computer resources support for software systems sufficient for USCG personnel to perform their responsibilities for initiation of IDS and to interact with the Contractor. Support will include hardware, software & training for all systems the Contractor requires the government to use. <b><u>(ISP), {C4ISR Architecture}</u></b>	C	C	C		
7.7 Design, develop, and acquire maintenance capability for support and periodic upgrade of software, including embedded software, used in IDS systems and their logistics support. <b><u>(ISP), {C4ISR Architecture}</u></b>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>8 FACILITIES</b>					
8.1 Assess existing facilities and itemize required facility changes (additions, renovations, upgrades, and downsizing) facility closures, and new facilities based on impacts from the proposed IDS. <b><u>(ISP)</u></b>	C	C	C	G	G
8.2 Define asset/facility requirements (physical dimensions, utility and housekeeping service requirements, etc.) <b><u>(ISP)</u></b>	C	C			
8.3 Assess the need for new facilities or facilities improvements, space needs, utilities, environmental requirements, real estate requirements, and capital equipment. <b><u>(ISP)</u></b>	C	C	C	G	G
8.4 Plan, budget, and acquire the changes identified in the <b><u>Facility Impact Assessment. (ISP), {TOC, Implementation Plan}</u></b>	G	G	G	G	G
8.5 Identify the schedule for necessary facility modifications , including provision for any necessary alternative arrangements so that Coast Guard operations or missions are not impacted while modifications are in process. <b><u>(ISP), {Implementation Plan}</u></b>	C	C	J	G	G
8.6 Closely coordinate with the CG to execute facility modifications. Identify the completion dates for modifications and commence coordination per the following schedule; 2 years in advance of changes < \$200K 4 years in advance of changes < \$1M 5 years in advance of changes > \$1M Those modifications that fall within these timeframes upon award are exempt. Identification and coordination for these modifications shall commence upon award. <b><u>(ISP, Facility Impact Assessment)</u></b>	C	C	C	G	G



Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>9 SUPPLY SUPPORT</b>					
9.1 Plan and implement the IDS provisioning process, including responsibilities, schedules and interfaces with existing systems and practices. Provision new assets and changes to existing assets. <b><u>(ISP)</u></b>	C	C	C		
9.2 Develop and implement an Outfitting Plan, i.e. consumables, Allowance Equipage Lists (AELs), Allowance Parts Lists (APLs), Operating and Maintenance Spares (OMS), charts, publications, medical allowances, etc. Outfit new assets and major changes to existing assets, ensuring CFO Act accountability, tracking, and compliance of government owned equipment and parts. <b><u>(ISP)</u></b>	C	C	C		
9.3 Establish and provide Outsourcing Criteria for considering systematically which, if any, material should be government vice Contractor furnished for supply and maintenance items. <b><u>(ISP)</u></b>	C	C	C		
9.4 Develop, provide, and manage the schedule for provisioning, outfitting, and supply support of assets and their subsystems including projected material support dates. <b><u>{IMS}</u></b>	C	C	C		
9.5 Provide a plan and method for interim supply support during introduction of the individual asset classes and their systems/equipment into service. Plan should include all organic and outsourced supply support functions as well as requirements/criteria necessary for transition to sustainment. <b><u>(ISP)</u></b>	C	C	C		
9.6 Identify equipment that is not delivered as an integral component of the assets but is required to support the fielding of assets (e.g., initial spares). Acquire same. <b><u>(ISP)</u></b>	C	C	C		
9.7 Establish a joint Government and Contractor process for targeting and resolving cross-functional, cross-organizational supply issues, analyzing and resolving high dollar parts issues, prioritizing allowance needs to meet budget constraints, etc.	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
9.8 Develop and implement an IDS Inventory Plan to acquire, warehouse, and manage IDS supply inventory, employing techniques to leverage the government's capital investment in facilities, optimize stock levels, and reduce overall inventory carrying costs, consistent with the RM&A requirements established for the supported assets. Plan, implement, and continuously improve computer capability to maintain, track, and refine inventories (depot and on-board) based on actual and projected consumption. Incorporate automated aids to the extent practical and cost effective. Incorporate capability to update inventories and databases as Engineer Changes [system upgrades/changes] are accomplished, etc. <u>(ISP)</u>	C	C	C		
9.9 Develop and implement a system for requisitioning IDS parts and tracking status of the requisitions, including interface to the Federal supply system. Plan implement, and continuously improve computer capability to identify and/or order parts based on maintenance or repairs due or requested. <u>(ISP)</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>10 SUPPORT AND TEST EQUIPMENT (S&amp;TE)</b>					
10.1 Establish and implement an S&TE Plan addressing the methods, organizational responsibilities, and schedule for identifying and procuring S&TE, for delivery, installation, and check-out of S&TE to each geographic location, and for training operators and maintainers in use of the S&TE. <u>(ISP)</u>	C	C	C		
10.2 Establish and implement a plan for operating, calibrating, maintaining, and replacing S&TE over the IDS life cycle. <u>(ISP)</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
10.3 Identify, acquire, and support S&TE required to support the fielding of the assets. <b>(ISP)</b>	C	C	C		
10.4 Plan and execute reallocation or disposal of ST&E in coordination and conjunction with replacement of obsolete equipment, C4ISR systems or subsystems, decommissioning or retirement of assets , and closing or realignment of facilities. <b>(ISP)</b>				C	

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>11 PACKAGING, HANDLING, STORAGE, AND TRANSPORTATION (PHS&amp;T)</b>					
11.1 Develop and implement the PHS&T Plan addressing methods/procedures for packaging, handling, storage and transportation of IDS system, asset, and equipment assemblies and components. Address PHS&T to/from the manufacturer, depot, or supply system warehouse to the asset and facility locations, addressing both initial destination per IDS delivery schedules and recurring transportation requirements based on maintenance support needs throughout the IDS life cycle. Address issues such as special containers, packaging disposal, maintenance during storage, shelf life, etc. for assemblies and components, as required. <b>(ISP)</b>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
11.2 Establish system, asset, and equipment transportability requirements in conjunction with packaging requirements to assure that equipment and components can be shipped and deployed within the IDS operating and maintenance environments. <u>(ISP)</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>12 TECHNICAL DATA (REFERENCE CLAUSES H.51, H.52)</b>					
12.1 Establish and document the technical data requirements for construction, testing, training, and operations at the system, asset and equipment level, and for each level of maintenance by equipment type. Develop and maintain a complete technical data package including <u>Technical Manuals</u> that describe the assets and facilities to be procured for IDS, and upgrades to legacy assets and facilities, at all levels from top system level requirements down to the lowest repairable level. The concept shall include but is not limited to technical data configuration management and change tracking, update procedures, method of information dissemination, and data storage. <u>(ISP)</u>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
12.2 Acquire and provide the technical data (including data rights and licenses, permission to reformat/reprint, etc.) to support the IDS for its life cycle consistent with the maintenance strategy, including the interface with the legacy technical data system. Where data rights are not available or cost effective to acquire, develop an approach for technical data support of training, maintenance, and supply after the manufacturer discontinues product. <b><u>(Technical Manuals)</u></b>		C	C		
12.3 Establish and manage the technical data development milestone schedule at asset class and system levels. <b><u>{IMS}</u></b>	C	C	C	C	C
12.4 Establish requirements, format, and content for and procurement of paper and interactive electronic technical manuals (IETMs) and any linked or companion electronic documents such as training course materials, Help functions, Configuration Status Reports, etc. Consider integration with related IDS data base applications necessary for asset operation and support in accordance with the CONOP and CONLOG. <b><u>(Technical Manuals)</u></b>	C	C	C		
12.5 Develop and implement a technical data plan addressing administrative procedures, user feedback loops, intelligent software agents, and other means as necessary, to efficiently ensure a constant high level of technical data consistency, timeliness, accessibility, specificity to individual assets, and accuracy. <b><u>(Technical Manuals)</u></b>	C	C	C		
12.6 Develop and integrate a Technical Manual Maintenance Authority (TMMA) function into the Contractor & government organizations and the IPDE Website. Develop functional interface with the legacy USCG organization; Identify and implement any policy and procedure changes necessary to implement the TMMA and its interface with the non-DW Coast Guard. <b><u>(Technical Manuals)</u></b>	C	C	C		

Table J20-3 Logistics Supportability (Continued)					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>13 LEGACY SYSTEMS</b>					
13.1 Develop, implement, and manage the integration of the IDS ILS system with legacy ILS systems and their support requirements. <b>(ISP)</b>	C	C	C		
13.2 Develop and accomplish an ILS Transition Plan to ensure orderly transition of legacy assets to IDS support requirements, capability, and practices. For legacy facilities and organizations with both IDS and non-IDS responsibilities, establish interfaces with non-IDS or (as a government responsibility) integrate IDS and non-IDS into a common support system. <b>(ISP)</b>	C	C	C		
13.3 Continuously evaluate impact on legacy practices and non-IDS assets within the Coast Guard. Coordinate interfaces; resolve incompatibilities. <b>(ISP)</b>	C	C	C		

Table J20-4 Availability of Assets					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
<b>1 AVAILABILITY</b>					
1.1 Identify and manage IDS and Asset Availability's (A <sub>o</sub> ) to those measures of effectiveness and performance thresholds for the assets and systems that underlie and support IDS system level availability requirements. <b>(ISP), {CONOPS, Asset Designs}</b>	C	C	C		

Table J20-4 Availability of Assets					
Item Description / (Associated Deliverable)	Phase				
	CTD	SDD	P&D	O&S	DIS
1.2 Incorporate on-going statistical monitoring and analysis of asset availability in the Maintenance Plan for each asset class. Provide performance assessment capability to prescribe corrective action. Plan, budget, and accomplish corrective actions, design upgrades, training, procedure changes, etc. where necessary to support IDS system level availability requirements. <u>(ISP), {CONOPS, Asset Designs}</u>	C	C	C		